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Attitudes of Social Work Students on the Use of Psychedelics as a Mental Health Treatment in Clinical Settings

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ATTITUDES OF SOCIAL WORK STUDENTS ON THE USE OF PSYCHEDELICS AS A MENTAL HEALTH TREATMENT IN CLINICAL SETTINGS

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Social Work

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ABSTRACT

Although psychedelic substances are currently categorized under federal law as a Schedule I controlled substance, there has recently been a renewed interest in the use of psychedelics to treat a number of mental health and substance use disorders. Research is garnering positive results in clinical trials, although much fear and stigma still surrounds psychedelic use. Future social workers' presence in both macro level practices, advocating for mental health treatments and access to care, as well as their work in micro level clinically focused practices adds to their relevancy and legitimacy in advocating for potential policy changes on therapeutic psychedelic usage at various levels.

This study aimed to discover social work students' attitudes toward using psychedelics in a clinical therapy setting. It used a survey questionnaire to measure students' perception of effectiveness, safety, acceptability, and knowledge of psychedelic use. The results of this study found significant relationships between prior psychedelic use, politics, and religion on perceived effectiveness, safety, acceptability, and knowledge while controlling for demographic variables such as age, gender, and social work programs. These results provide valuable insights into the perspectives of the next generation of mental health professionals and can inform future discussions about the implementation of psychedelics in the mental health and social work fields to treat mental health disorders.

ACKNOWLEDGEMENTS

This project would not have been possible without the support and guidance of my research advisor, Dr. Yawen Li. I would also like to express my sincere appreciation for the participants who took the time to complete the survey, which allowed me to conduct this research. Many thanks are also conveyed to the faculty who kindly helped distribute my survey to their students. I would like to thank all of my professors for not only teaching me the principles of social work practice, but also for continuing to do the work themselves to solve complex social problems. To my wonderful cohort, I appreciate the advice, support, and encouragement that I have received since our very first days together. I know you all will go on to do tremendous things in the world of social work and beyond

I could not have undertaken this journey without the support and understanding of my children, Ansley, Alaina, and Alex. Time with them during these last two years has been my ultimate source of self-care and preservation that has helped me make it through until the end. Finally, special thanks to my loving husband for providing constant encouragement for me to keep going and whose love and support helped make this dream come true.

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CHAPTER ONE:

INTRODUCTION

Problem Formulation

There has been a recent renewed interest in the powerful transformative effects touted by proponents of psychedelic use as a key to freeing people from the grips of alcoholism, drug abuse, depression, anxiety and many other mental health disorders. In recent years, therapeutic psychedelic usage has been hailed by some in the psychedelic community as the Psychedelic Renaissance (Sessa, 2017; Yaden et al., 2021). For the purpose of our study, the terms psychedelics are used to describe any psychoactive substance that can significantly alter one's perception and cognition.

The past two decades have witnessed increased amounts of clinical trials, many of which are ongoing, aimed at using psychedelics to treat a number of different mental health disorders. This is a far cry from the abrupt termination of psychedelic research and mainstream accepted use experienced in the 1970's when psychedelics were deemed by the United States Drug Enforcement Agency (DEA) to have a high abuse potential and no accepted medical use (Drug Enforcement Administration [DEA] 2018).

Psychedelics have been used for both recreational and medicinal purposes for thousands of years. Indigenous and ethnic groups have a rich culture seeped in the use of psychedelics as a means of spiritual connection,

religious practices, and medicinal purposes (George et al., 2019). Perhaps, it is these traditions that have led to today's revival of psychedelics to treat mental health disorders, as opposed to the hippy counterculture popularized in the US in the 1950s and 1960s (George et al., 2019). During this time, psychedelics saw a rise in research and mainstream recreational use for many years until its subsequent categorization as a Schedule I drug, which not only led to illegalization but also increased stigma around the usage of psychedelics even for medicinal or religious purposes (Earp &Yaden, 2021).

With the recent resurgence of clinical research into the effectiveness of psychedelic drugs to treat mental health disorders, questions remain about the attitudes of mental health providers toward these illicit drugs. Increasingly, the general public is becoming aware of the possibility that these drugs may be a viable treatment option for mental health and drug and alcohol use disorders. Research is garnering positive results as to their effectiveness in clinical trials. Yet, there remains a substantial stigma and fear surrounding psychedelic use rooted in a sordid history and the current illicit nature of these drugs and perpetuated by the war on drugs (Davis et al. 2021). Without widespread acceptance from mental health communities and clinicians, the chances of them becoming mainstream treatments are unlikely (Davis et al., 2021).

Social workers are often uniquely positioned to work in conjunction with drug prescribers to provide clinical support and advocacy for individuals in need of psychoactive medications to treat mental health disorders (Hutchinson &

Bressi, 2020). Theoretically, the very nature of administering therapeutic psychedelics would call for a prescription from a trained medical physician as well as highly supervised sessions with trained mental health professionals including social workers, who could perform mental health prescreening, assessments, and support during and after administration (Curtis et al., 2020). Due to this pairing, it is important to learn of the attitudes, biases, knowledge of use, and opinions of preservice social workers about the use of psychedelics as mental health treatments and their potential harm or effectiveness.

Future social workers' presence in both macro-level practices, advocating for marginalized populations, as well as their work in micro-level clinically focused practices with individuals, adds to their relevance in legitimizing and advocating for policy changes on therapeutic psychedelic usage at various levels. Their voices should be heard when addressing these issues. Support is needed by current and future social workers in order to ensure that these therapies can be utilized by individuals who would benefit from them, if and when these therapies become legalized and mainstream. As more psychedelic-assisted treatment options become available, it is important to understand mental health providers' attitudes associated with psychedelic-assisted therapies (Davis et al., 2021).

With this knowledge, this research sought to understand what are the attitudes of current Master of Social Work students toward the use of psychedelic-assisted therapies? If and when said psychedelic-assisted therapies

become approved by the FDA and potentially rescheduled for medical utilization, would these future social workers have the willingness and knowledge to recommend such treatments and work alongside prescribers of these medications to provide mental health counseling and other social work services?

CHAPTER TWO:

LITERATURE REVIEW

Current State of Psychedelic Research

In 2006 Johns Hopkins researchers were one of the first groups in the United States granted permission to resume studying the therapeutic use of psychedelics in clinical trials after the DEA classification. Their initial research presented extremely positive effects of a single dose of psilocybin and is said to have led to the renewed interest in using psychedelics for clinical use (Ercolano, 2021). The Johns Hopkins Center for Psychedelic and Consciousness Research currently has over $17 million in funding. This large-scale funding is on par with several other psychedelic research organizations throughout the United States and the world, which are working diligently to fund medical research of psychedelics and increase cultural curiosity and decrease stigma associated with psychedelic use, especially for medicinal purposes (Barnette et al., 2018; Davis et al., 2021).

In some cases, psychedelics have already gained approval from the Food and Drug Administration (FDA) for medical use. A ketamine-derived nasal spray has been approved for use in treatment-resistant depression, which is opening the door to many other psychedelic drugs for a variety of different medical and mental health indications (*Psychedelics Drug Development Tracker*, 2021). To date there are no less than fifty clinical trials being conducted by psychedelic companies, which are stewarding the way to developing psychedelic drug

therapies for FDA approval with eventual aspirations of declassification by the DEA (*Psychedelics Drug Development Tracker*, 2021).

Recent clinical research has shown remarkably positive results employing psychedelic substances to treat PTSD, substance use disorders, treatment-resistant depression, anxiety, suicidal ideation, and more (Carhart-Harris et al., 2017; Davis, Barret et al., 2021; DiVito &Leger, 2020; Watts et al., 2017). The results from these studies not only show marked decreases in anxiety, depression, and hopelessness but also unintended results of increasing creativity, productivity, and well-being (Polito & Stevenson, 2019).

These re-emerged therapies come at an opportune time as the United States is seeing a decrease in life expectancy due to increased suicide rates and deaths from opioid use despite an increase in antidepressant prescription rates (Curtis et al., 2020). The current array of treatment modes seems to be falling short, unable to sufficiently curtail the pervasive mental health challenges experienced by so many Americans. Medicinal innovation in the form of therapeutic psychedelics has accelerated development and is often heralded by drug researchers and stakeholders as having potentially life-changing benefits (David, Barrett, et al., 2021; DiVito & Leger, 2020; Earp & Yaden, 2021; Ercolano, 2021; Hutchison & Bressi, 2020).

Roles of Social Workers in Therapeutic Psychedelics Paradigm

Questions remain about the roles social workers might play in the new therapeutic psychedelic paradigm. Previous medical models have placed social workers in clinical roles working directly with clients and medication prescribers to deliver psychotherapy, advocate for clients' rights, and provide clients with needed resources and education (Hutchison & Bressi, 2020). Thus far, clinical social workers have been included in various psychedelic clinical trials acting to coordinate services as well as to provide psychotherapeutic support (Hutchison & Bressi, 2020). Without legalization and reclassification of psychedelics for medical use, it is difficult to postulate precisely what role social workers would play in the direct administration of therapeutic psychedelics if or when the time comes.

Social Workers Commitment to Core Values.

It would be safe to assume that social workers will continue to advocate on behalf of clients in order to ensure safe, ethical, and equitable applications in psychedelic research arenas as well as in practice. Social workers are guided by and ethically bound by a set of core values and ethical principles set forth by the National Association of Social Workers (NASW). This new frontier of research into therapeutic psychedelics implores social workers to uphold their values of *Service*, *Social Justice*, *Dignity and Worth of the Person*, *Integrity*, and *Competence* (National Association of Social Workers, 2021).

Past research in psychedelics elicited unethical research practices that eventually fueled the near banning of psychedelic research and subsequent classification as a schedule I drug (George et al., 2019; Pilecki et al., 2021). Participation in past research was often gained through coercive and deceptive practices. Including social workers and marginalized voices in these spaces would help to ensure that research and implementation is done in a safe, ethical, and socially equitable manner (Curtis et al., 2020; Earp & Yaden, 2021; Hutchinson & Bressi, 2020).

If the research on therapeutic psychedelics rings true, social workers have an obligation to advocate for individuals and marginalized groups' right to access these treatments. Historically, social workers have been formidable advocates in pharmacological treatments and harm reduction programs (Hutchinson & Bressi, 2020; Pilecki et al., 2021). Social workers are particularly versed in harm reduction approaches and could apply these practices in the same manner they have applied them to other illicit drug use by providing psychoeducation, resources, and support to individuals who are determined to use psychedelics.

On the condition that these drugs are approved for conventional practices, social workers will need practical knowledge of the use and a keen understanding of coordinating and delivering therapeutic psychedelic interventions (Hutchinson & Bressi, 2020). Hutcinson & Bressi (2020) assert that due to the high paced development and current large scale research endeavors, it is imperative that social workers be competent in application and policies to

ensure proper and equitable use. It is also vital that social workers and other mental health counseling providers be included in the innovative spaces of psychedelic drug development in order to understand treatment options, research practices, implications for use, and create policies that allow for equitable use of therapeutic psychedelics (Curtis et al., 2020; Hutchinson & Bressi, 2020)

Social Workers Obligation to the Marginalized and Underserved

As part of the NASW ethical principles, social workers are ethically bound to uphold values of social justice. A prevailing theme in the review of literature for this research study was that of social justice and the insistence on including the voices of marginalized and underserved groups. Much consideration must be made to ensure that research and future practices in therapeutic psychedelics work for and not against marginalized groups and individuals. Unfortunately, there already seems to be a lack of diversity in the research of therapeutic psychedelics as well as a lack of access to approved therapies such as ketamine. Social worker's knowledge of this deficiency is paramount moving forward, as social workers are bound by ethics to advocate and serve these groups.

The categorization of psychedelic substances as illegal, leads to a lack of access by marginalized groups and individuals due to high costs. Take for example the recently FDA-approved dissociative anesthetic with psychedelic characteristics, Ketamine. This drug has been approved for off-label use as a

treatment for mental health disorders. Research has shown the positive effects of this drug, but as an off-label drug, this treatment is not covered by third-party payers and can cost a client hundreds of dollars per session, making it inaccessible to most individuals (Hutchinson & Bressi, 2020). Without rescheduling by the DEA these drugs will not likely become widely accessible to marginalized groups, who are often most in need of these treatments.

Federally funded research mandates racial and ethnic inclusion and satisfactory representation through the National Institute of Health (NIH) Revitalization Act of 1993. Federal funding is often not available to illicit drug research that is Schedule I and labeled as having no medical use. Most research in the United States is being conducted through private funding, which negates this mandate (Michaels et al., 2018). The negative effects of this are seen in the fact that Black people are largely underrepresented in these research endeavors (Buchanan, 2021; Earp & Yaden, 2021; Michaels et al., 2018; Sessa, 2017). This lack of diversity creates a narrow framework and misinforms the path toward therapeutic psychedelic practices and essentially excludes the marginalized groups that often have the greatest need for mental health services (Buchanan, 2021; Earp & Yaden, 2021: George et al., 2019).

Theories Guiding Conceptualization

Theory of Attitudes - Stigma

The Theory of Attitude and particularly the subcategory of Stigma informs this research. Theories on attitudes have been studied from both psychological and sociological perspectives, and are often described as ones learned judgments, good and bad, toward people, ideas, and groups, which are salient and changeable (Chaiklin, 2011; Olufemi, 2012). Attitudes are the driving force behind Stigma, which have attributes of negative connotations as opposed to being neither good nor bad (Clair, 2018). While attitudes do not necessarily drive behaviors, they certainly have an influence over behaviors. Stigmas have a greater influence over behaviors such as those of drug users and individuals with mental illnesses (Clair 2018; National Academies of Sciences, Engineering, and Medicine et al., 2016). This study applied these theories with the knowledge of the longstanding stigmatization of the use of psychedelics and substance use and mental health disorders.

Understanding the nature of stigma related to psychedelic drug use, the use of illicit substances to treat substance abuse and mental health disorder, and mental health disorders, in general, will helps pave the way to destigmatize these issues. Stigma's sociobiological function is to exclude members of social groups that could threaten social disorder (Clair, 2018). The current stigma surrounding psychedelic drug usage of both recreational and medicinal uses still carries the long-established stigma perpetrated in the late 1960s characterization of

psychedelics being dangerous, addictive, and a threat to cultural norms (Belouin & Henningfield, 2018). It is crucial for preservice, acting social workers, and other mental health providers to study their own attitudes and the surrounding stigmas associated with psychedelic usage that may interfere with their own biases related to using these substances in practice.

Some questions to consider in this research when gauging social work students' attitudes are in the domains of perceived effectiveness, safety, acceptability, and knowledge of psychedelic substances to treat mental health and substance use disorders. Would social work students advocate for equitable distribution of psychedelic drug therapies to marginalized, oppressed, and underserved populations? What attitudes do social work students hold about their role in the administration of psychedelics drug therapies?

CHAPTER THREE:

METHODS

Introduction

This study sought to describe the attitudes of graduate and undergraduate social work students at several Southern California universities toward the use of psychedelic drugs in the treatment of mental health and substance use disorders. The sections discussed will be the research question, research design, sampling, data collection and instruments, procedures, protection of human subjects, and data analysis, and summary.

Research Question

The research questions for study were as follows: What are the attitudes of current social work students at several Southern California universities toward the use of psychedelic assisted therapies? If and when further psychedelic assisted therapies become approved by the FDA and potentially rescheduled for medical utilization, would future social workers have the willingness and knowledge to recommend such treatments and work alongside prescribers of these medications to provide mental health counseling and other social work services?

Research Design

The purpose of this study was to identify and describe the attitudes of social work students at several Southern California universities toward psychedelic-assisted mental health therapy. This was a descriptive quantitative

research project that sought to understand attitudes and knowledge of psychedelic-assisted therapies to treat mental health and substance use disorders. It is important to understand these attitudes due to the current stigma that surrounds illicit drugs. The attitudes of future social workers toward new drug therapies are important as social workers play important roles in assisting and advocating for clients' participation in drug therapies. Current research being conducted on the use of psychedelics for mental health and substance use disorders is garnering positive results. Without proper support from mental health providers including social workers there will be a long and arduous road to the implementation of these drug therapies. Understanding the attitudes of current social work students will give a glimpse of the type of support that might be given in the implementation, promotion, and advocation of these drug therapies.

Sampling

This study utilized a nonprobability convenience sample of social work students at several Southern California universities. This method was proposed due to the author's ability to gain access to these students through email correspondence. This study explored the attitudes of social work students toward the use of psychedelics to treat mental health disorders and their knowledge of using methods and implications for psychedelic-assisted therapies to treat mental health and substance use disorders. The criteria involved in this study was the participant's categorization as a social work student at in a Southern California university over the age of 18.

Data Collection and Instruments

To complete this research, the researcher used a survey questionnaire. Due to the illicit nature of the psychedelic drug use, the survey method was chosen in order to obtain honest answers through an anonymous method. The survey method was chosen due to the ability to reach the largest number of participants in order to garner valid and reliable results. The survey posed questions about participants' attitudes and knowledge of psychedelics for therapeutic and recreational purposes.

The measurement instrument for this study was comprised of statements, which asked participants if they strongly agree, agree, are neutral, disagree or strongly disagree to various statements. The independent variables in this study are the statements related to therapeutic psychedelics and knowledge about psychedelics. The dependent variable in this study is the respondents answer through the Likert data. Knowledge and attitude were measured using a self-measurement four-point Likert scale.

The main independent variables in this study were perceived effectiveness, knowledge, perceived safety, acceptability, and knowledge of psychedelics to treat mental health and substance use disorders. The instrument included statements related to these variables. A scale was constructed by using Likert-type items measuring the respondent's level of agreement (1 = strongly agree; 2 = agree; 3 = neutral; 4 = disagree; 5 = strongly disagree).

Some of the statements were as follows: 1. The use of therapeutic psychedelics can improve outcomes in mental health disorders; 2. Psychedelics are addictive; 3. I think psychedelic-assisted treatment is a reasonable treatment approach for mental health and substance use disorders; 4. My social work experiences have given me adequate knowledge about therapeutic psychedelics. There were also two statements asking respondents about their personal experience using psychedelics and whether they feel it was a beneficial experience. These were included for the purpose of determining if there is any correlation between previous psychedelic use and attitude towards psychedelics for clinical use. For a complete list of questions please see the attached survey that was distributed.

The Likert scale is a methodical scale that asks respondents to choose an option that best aligns with their view using a numbered system. This system is often used in measuring respondents' attitudes because it measures the degrees to which respondents agree or disagree with a question or statement. Empirical data shows that the Likert scale has a reliability rating from 88-90% (Louangrath, 2018).

The data survey was delivered using Qualtrics distributed by email to social work students at several Southern California university schools with an included hyperlink. All students who met the inclusion criteria were included in this study. This study asked questions related to students' knowledge about psychedelic-assisted mental health and substance use therapies, personal

experience with psychedelics, and potential biases and attitudes toward psychedelic-assisted therapies.

Procedures

A recruitment email with information about the survey was sent to the California State University San Bernardino Director of Social Work and was distributed to professors at several other Southern California universities. This recruitment email had a link that took participants to the Qualtrics survey and provided information about the researcher, the purpose of the study, and how the information would be used. Assurance that all information collected would be confidential and completely anonymous was included in this informational email. This email provided a link that took the participant directly to the survey through Qualtrics. Informed consent was included in the survey and participants agreed to participate but did not give their signatures as the survey was kept anonymous. Once they consented, they were taken to the survey.

Protection of Human Subjects

The use of an anonymous survey through Qualtrics was employed in order to encourage honest feedback on topics that individuals may otherwise not want to answer without the aid of anonymity, such as but not limited to the personal history of psychedelic use. Since no identifying information was gathered, there is little to no risk that individuals could be identified in this data.

To ensure confidentiality, the data collected was always stored through password protected and encrypted server on Google drive provided to students by California State University San Bernardino. This data was only assessable to the researcher and any person or persons working with the researcher as approved by the Institutional Review Board. The data was collected through Qualtrics, using a setting that does not allow the gathering of IP addresses that could link participants to the information collected ensuring anonymity. The data will be kept for three years.

Data Analysis

Data was analyzed using the statistical analysis program IBM SPSS Statistics 28. First, descriptive analyses were conducted to examine the distribution of variables using percentage, mean and standard deviation. Independent sample T-test, One-way ANOVA, and bivariate, and multivariate linear regression analyses were conducted to compare group differences between the major demographic variables and four dependent variables (perceived effectiveness, perceived safety, perceived acceptability, and knowledge) associated with the use of psychedelics in general and in a clinical or therapeutic setting.

Summary

This study examined the attitudes of social work students at university schools on the use of psychedelics as a mental health treatment in clinical

settings. The use of survey data created an anonymous environment needed to explore attitudes about subjects dealing with illicit drugs categorized as psychedelics. Quantitative methods best facilitated this anonymity and will garner the largest number of participants.

CHAPTER FOUR:

RESULTS

Introduction

This chapter provides an analysis of the data that was collected from participants for the purpose of measuring their perceived effectiveness, safety, acceptability, and knowledge of psychedelic use to treat mental health and substance use disorders. A total of 95 students completed the survey for the study. All participants were current BASW and MSW students at Southern California universities at the time the research was conducted. Data collection took place from October to December 2022. Statistical analysis was performed using IBM SPSS software (version 28). This chapter includes descriptive statistics, correlative data, a presentation of findings, and a summary of the results.

Sample Characteristics

Analyses were conducted on all demographic variables including age, gender, university program enrollment, ethnicity, religiosity, political ideology, psychedelic use, and degree of benefit of use if applicable. Demographics information can was used to determine relationships between both independent and dependent variables. The results from this analysis provided insights into the demographics of participants in the study. Table 1 presents the breakdown of these demographics.

Table 1. Demographics of Study Participants

	Frequency	Percentage
(M/SD)	(N)	%
Age (30.61/8.93)	71	(30.61/8.93)
Gender	92	
Male		8.7
Female		89.1
Non-binary/third gen		1.1
Prefer not to answer		1.1
Ethnicity	92	
Hispanic		52.2
Asian		3.3
Black		6.5
White		32.6
Other		5.4
SW Program	92	
BASW		19.6
MSW		80.4
Religiosity	91	
Not Religious		38.5
Slightly Religious		27.5
Moderately Religious		17.6
Religious		12.1
Very Religious		4.4
Political Ideology	92	
Conservative		2.2
Somewhat Conservative		3.3
Moderate		22.8
Somewhat Progressive		15.2
Progressive		42.4
I do not subscribe to above		14.1
Psychedelic use	80	
Did not use psychedelics		63.7
Used Psychedelics		33.8
Degree of Benefit	26	
Detrimental		11.5
Not beneficial at all		30.8

Table 1. Continued

	Frequency	Percentage
(M/SD)	(N)	%
Beneficial		46.2
Very Beneficial		11.5

The age of participants ranged from a minimum of 19 years old to a maximum of 62 years old. The average age of participants was 30.61 with a standard deviation of 8.93. Most students in this study identified as female (n=82, 89.1%) compared to male (n=8, 8.7%) participants, while 1 participant identified as non-binary or third gender accounting for 1.1% of participants.

The ethnicity data showed most participants identified as Hispanic (n=48, 52.2%), while white participants accounted for 32.6% (n=30). The remainder of participants identified as Asian (n=3, 3.3%), Black (n=6, 6.5%), and Other (n=5, 5.4%). MSW students accounted for 80.4% (n=74) of participants, while BASW students accounted for 19.6% (n=18).

Participants were asked to rate their level of religiosity from not religious, slightly religious, moderately religious, religious, to very religious. Less than 40 percent of participants identified themselves as not religious (38.5%, n=35). There were 25 participants who identified themselves as slightly religious (27.5%), while 16 participants identified themselves as moderately religious (17.6%). There were 11 participants who identified themselves as religious (12.1%), while only 4 participants identified as very religious (4.4%).

Participants were also asked to identify their political ideology in the following categories of conservative, somewhat conservative, moderate, somewhat progressive, progressive, or do not subscribe to any of these. The majority of participants identified themselves as progressive (n= 39, 42.4%) or moderate (n=21, 22.8%). 14 participants identified as somewhat progressive (15.2%), while 13 participants did not subscribe to any political ideology listed at 14.1%. A minority of participants 2.2% and 3.3% identified as conservative (n=2) and somewhat conservative respectively (n=3).

This study asked participants if they have ever used psychedelics in the past, and if so, participants were asked to rate their benefits of use from detrimental, not beneficial at all, or beneficial, to very beneficial. Of the 80 participants that answered this question, 33.8% (n=27) reported they had previously used psychedelics, while 63.7% (n=51%) reported they had not previously used psychedelics in the past. Of the participants who answered yes to the prior usage question, 46.2% (n=12) found it to be beneficial, 11.5% (n=3) found it to be very beneficial, 30.8% (n=8) found it not beneficial at all, and 11.5% (n=3) found it to be detrimental.

Comparisons Across Groups

Further analyses were conducted to show mean comparisons across different groups. Table 2 and Table 3 present these results.

Table 2. Mean Comparisons of Effectiveness and Safety

	Effectiveness			Safety		
(N=95)	M	SD	P	M	SD	P
Age			0.99			0.14
Psychedelic Use			0.01			<.001
Did Not Psychedelic	11.74	3.56		11.58	3.67	
Used Psychedelic	9.74	2.84		14.70	2.87	
Program			0.67			0.80
BASW	10.76	3.03		12.29	4.33	
MSW	11.16	3.45		12.55	3.57	
Degree of Benefit of Use			0.05			<.001
Detrimental	10.33	1.53		12.00	3.61	
Not beneficial at all	10.88	2.80		14.25	2.82	
Beneficial	9.83	2.76		15.25	2.77	
Very Beneficial	5.67	1.53		16.00	2.65	
Gender			0.49			0.48
Male	10.00	1.60		14.00	4.38	
Female	11.24	3.49		12.33	3.61	
Non-binary/third gender	7.00	.		17.00	.	
Ethnicity			0.36			0.08
Hispanic	10.98	3.05		12.11	3.21	
Asian	10.67	5.77		11.67	3.51	
Black	12.80	1.79		12.80	1.30	
White	10.59	3.64		13.72	4.19	
Other	13.40	3.85		9.00	4.64	
Religiosity			0.00			0.08
Not Religious	9.75	3.12		13.63	4.23	
Slightly Religious	10.52	2.83		12.26	3.08	
Moderately Religious	12.13	3.61		12.50	3.12	
Religious	13.50	2.42		11.20	3.52	
Very Religious	14.25	4.03		8.75	2.75	
Political Ideology			0.00			0.02
Conservative	11.50	0.71		8.50	2.12	
Somewhat Conservative	13.00	3.46		10.00	5.29	
Moderate	13.40	3.38		10.70	3.85	
Somewhat Progressive	10.79	2.61		13.86	2.91	
Progressive	9.64	3.37		13.56	3.36	

An independent-sample t-test was conducted to compare the mean scores of the different degree programs on Perceived Effectiveness of psychedelic use (see Table 2). BASW had a mean score of 10.76 (SD = 3.03) and MSW had a mean score of 11.16(SD = 3.45). The t-test revealed a non-significant difference between the two groups t(84) = -.432, p = .67, d = .117. This indicates no significant difference between BASW and MSW students' attitude regarding effectiveness of psychedelics. Overall, these results suggest that the difference in programs of BASW and MSW does not significantly affect participants attitude on perceived effectiveness of psychedelic use.

An independent sample t-test was conducted to compare the mean scores of the different degree programs on safety of psychedelic use (see Table 2). BASW had a mean score of 12.29 (SD = 4.33) and MSW had a mean score of 12.55 (SD = 3.57. The t-test revealed a non-significant difference between the two groups t(84) = -.26, p = .80, d = .07. This indicates no significant difference between BASW and MSW students' attitude regarding safety of psychedelics. Overall, these results suggest that the enrollment in programs of BASW or MSW is not significantly associated with participants' attitude about perceived safety of psychedelic use.

Table 3. Mean Comparisons of Acceptability and Knowledge

	Acceptability			Knowledge		
(N=95)	M	SD	P	M	SD	P
Age			0.43			0.43
Psychedelic Use			0.00			0.00
Did Not Psychedelic	16.89	5.33		16.89	5.33	
Used Psychedelic	13.00	4.36		13.00	4.36	
Program			0.41			0.41
BASW	14.53	3.23		14.53	3.23	
MSW	15.80	5.56		15.80	5.65	
Degree of Benefit of Use			0.027			0.027
Detrimental	17.33	6.51		17.33	6.51	
Not beneficial at all	14.45	3.45		14.75	3.45	
Beneficial	11.75	3.67		11.75	3.67	
Very Beneficial	8.33	2.08		8.33	2.08	
Gender			0.14			0.14
Male	12.25	3.99		12.25	3.99	
Female	15.86	5.29		15.86	5.29	
Non-binary/third gender	13.00	.		13.00	.	
Ethnicity			0.56			0.56
Hispanic	15.95	5.08		15.95	5.08	
Asian	16.33	8.96		16.33	8.96	
Black	18.25	5.32		18.25	5.32	
White	14.38	4.53		14.38	4.53	
Other	16.80	9.09		16.80	9.09	
Religiosity			0.00			0.00
Not Religious	13.52	4.94		13.52	4.94	
Slightly Religious	14.55	5.08		14.55	5.08	
Moderately Religious	17.94	4.89		17.94	4.89	
Religious	18.78	3.77		18.78	3.77	
Very Religious	21.00	4.97		21.00	4.97	
Political Ideology			<.001			<.001
Conservative	17.50	0.71		17.50	0.71	
Somewhat Conservative	21.67	7.77		21.67	7.77	
Moderate	18.89	4.40		18.89	4.40	
Somewhat Progressive	14.85	5.15		14.85	5.15	
Progressive	13.15	4.55		13.15	4.55	

An independent sample t-test was conducted to compare the mean scores of the different degree programs on perceived acceptability of psychedelic use (seeTable 3). BASW had a mean score of 14.53 (SD = 3.22638) and MSW had a mean score of 15.80 (SD = 5.65201). The t-test revealed a non-significant difference between the two groups [t(79) = -.837, p = .41, d = -.239]. This indicates no significant difference between BASW and MSW students' attitudes regarding acceptability of psychedelics use. Overall, these results suggest that the enrollment in programs of BASW or MSW is not significantly associated with participants' attitude about perceived acceptability of psychedelic use.

An independent sample t-test was conducted to compare the mean scores of two groups on the different degree programs on the perceived knowledge of psychedelic use (see Table 3). BASW had a mean score of 14.53 (SD = 3.23) and MSW had a mean score of 15.80 (SD = 5.65). The t-test revealed a non-significant difference between the two groups [t(79) = -.837, p = .41, d = .239]. This indicates no significant difference between BASW and MSW students perceived knowledge of psychedelic use. Overall, these results suggest that the enrollment in programs of BASW or MSW is not significantly associated with participants' attitude about perceived knowledge of psychedelic use.

An independent sample t-test was conducted to compare the mean scores of two groups of students, those who had used psychedelics previously and those who had not used psychedelics and perceived effectiveness of use (see Table 2). The group who had previously used psychedelics had a mean score of

9.74 (SD = 2.84) and the group who had not used psychedelics before had a mean score of 11.74 (SD = 3.56). The t-test revealed a significant difference between the two groups [t(78) = 2.53, p = .01, d = .598]. This indicates a significant difference between those who have previously used psychedelics and those who have not on attitudes towards perceived effectiveness of psychedelics use. Overall, these results suggest that the participants who have used psychedelics have higher perceived effectiveness of psychedelics usage.

An independent sample t-test was conducted to compare the mean scores of two groups of students who had used psychedelics previously and those who had not used psychedelics and perceived safety of use (see Table 2). The group who had previously used psychedelics had a mean score of 14.70(SD =2.87) and the group who had not used psychedelics before had a mean score of 11.58(SD = 3.67). The t-test revealed a significant difference between the two groups [t(78) = 2.53, p = <.001, d = .911]. This indicates a significant difference between those who have previously used psychedelics and those who have not on attitudes towards perceived safety of psychedelics use. Overall, these results suggest that those who have done psychedelics have higher levels of perceived safety of psychedelic use than those who have not used psychedelics.

An independent sample t-test was conducted to compare the mean scores of two groups of students who had used psychedelics previously and those who had not used psychedelics and perceived acceptability of use (see Table 3). The group who had previously used psychedelics had a mean score of 13.00(SD

=4.36) and the group who had not used psychedelics before had a mean score of 16.89 (SD = 5.33). The t-test revealed a significant difference between the two groups [t(78) = 2.53, p = .002, d = .773]. This indicates a significant difference between those who have previously used psychedelics and those who have not on attitudes towards perceived acceptability of psychedelics use. Overall, these results suggest that those who have used psychedelics have higher levels of perceived acceptability than those who have not used psychedelics.

An independent sample t-test was conducted to compare the mean scores of two groups of students who had used psychedelics previously and those who had not used psychedelics and perceived knowledge of use (see Table 3). The group who had previously used psychedelics had a mean score of 13.00(SD =4.36) and the group who had not used psychedelics before had a mean score of 16.89 (SD = 5.33). The t-test revealed a significant difference between the two groups [t(78) = 2.53, p = .002, d = .773]. This indicates a significant difference between those who have previously used psychedelics and those who have not on attitudes towards perceived knowledge of psychedelics use. Overall, these results suggest that those who have done psychedelics have higher levels of perceived knowledge of psychedelic use than those who have not done psychedelics.

One-way ANOVA tests were conducted to examine the differences between three gender groups (male, female, and non-binary) on perceived effectiveness, safety, acceptability, and knowledge of psychedelic use (see Table

2 and Table 3). The analysis revealed no significant differences between the three groups (males, females, and non-binary) on all of the four outcomes of perceived effectiveness, safety, acceptability, and knowledge of psychedelics use.

A one-way ANOVA was conducted to examine the differences between five ethnic groups (Hispanic, Asian, Black, White, and Other) on perceived effectiveness, safety, acceptability, and knowledge of psychedelic use (see Table 2 and Table 3). The analysis revealed no significant difference between the five groups on all of the four outcomes of perceived effectiveness, safety, acceptability, and knowledge of psychedelics use.

A one-way ANOVA was conducted to examine the differences between five religious degree groups (Not Religious, Slightly Religious, Moderately Religious, Religious, Very Religious) on perceived effectiveness of psychedelic use (see Table 2). The analysis revealed a significant main effect of group [$F(4, 80) = 4.65$, $p = .002$]. A one-way ANOVA Post hoc analyses using Tukey's HSD showed that participants identifying as not religious had significantly lower mean perceived effectiveness scores compared to those who identified as very religious, religious, and moderately religious ($p < .05$).

A one-way ANOVA was conducted to examine the differences between the five religious degree groups on perceived safety of psychedelic use (see Table 2). The analysis revealed no significant differences between these groups [$F(4, 80) = 2.200$, $p = .08$].

A one-way ANOVA was conducted to examine the differences between five religious degree groups on perceived acceptability of psychedelic use (see Table 3). The analysis revealed a significant main effect of group [$F(4, 75) = 4.79$, $p = .002$]. Post hoc analyses using Tukey's HSD showed that participants identifying as not religious had significantly lower mean perceived acceptability scores compared to those identifying as very religious, religious, and moderately religious ($p < .05$).

A one-way ANOVA was conducted to examine the differences between five religious degree groups on perceived knowledge of psychedelic use (see Table 3). The analysis revealed a significant main effect of group [$F(4, 75) = 4.79$, $p = .002$]. Post hoc analyses using Tukey's HSD showed that participants who identified as not religious had significantly lower mean perceived knowledge scores compared to those who identified as very religious, religious, and moderately religious ($p < .05$).

A one-way ANOVA was conducted to examine the differences between 6 degrees of political ideology groups on perceived effectiveness of psychedelic use (see Table 2). The analysis revealed a significant main effect of group [$F(5, 80) = 4.11$, $p = .002$]. Post hoc analyses using Tukey's HSD showed that participants identifying as progressive had significantly lower mean perceived effectiveness scores compared to those identifying as moderate, somewhat conservative, and conservative ($p < .05$).

A one-way ANOVA was conducted to examine the differences between 6 degrees of political ideology groups on perceived safety of psychedelic use (see Table 2). The analysis revealed a significant main effect of group [$F(5, 80) = 3.00$, $p = .02$]. Post hoc analyses using Tukey's HSD showed that those who identified as conservative had significantly lower mean perceived safety scores compared to somewhat progressive and progressive ($p < .05$).

A one-way ANOVA was conducted to examine the differences between 6 degrees of political ideology groups on perceived acceptability of psychedelic use (see Table 3). The analysis revealed a significant main effect of group [$F(5, 75) = 4.75$, $p = <.001$]. Post hoc analyses using Tukey's HSD showed that those who identified as progressive had significantly lower mean perceived acceptability scores compared to somewhat conservative, moderate, and conservative ($p < .05$).

A one-way ANOVA was conducted to examine the differences between 6 degrees of political ideology groups on perceived knowledge of psychedelic use (see Table 3). The analysis revealed a significant main effect of group [$F(5, 75) = 4.75$, $p = <.001$]. Post hoc analyses using Tukey's HSD showed that those who identified as progressive had significantly lower mean perceived knowledge scores compared to somewhat conservative, moderate, and conservative ($p < .05$).

Correlation Analysis

Correlation tests were conducted to examine the relationships between the four dependent variables of Perceived Effectiveness, Perceived Safety, Perceived Acceptability, and Perceived Knowledge. Table 4 is a presentation of this data analysis.

Table 4. Correlations Across Variables

	1	2	3	4
1. Effect	-			
2. Safety	-.58	-		
3. Accept	.73	-.47	-	
4. Know	.73	-.47*	1.0	-

A correlation test was conducted to examine the relationship between perceived effectiveness and perceived acceptability. The Pearson/Spearman correlation coefficient was .73 (p = <.001). This indicates a positive strong correlation between the two variables. Therefore, participants who perceived psychedelics as more effective were also more accepting of psychedelic usage.

A correlation test was conducted to examine the relationship between perceived effectiveness and perceived knowledge. The Pearson/Spearman correlation coefficient was .73 (p = <.001). This indicates a positive strong correlation between the two variables. Therefore, participants who perceived

psychedelics as more effective were also more knowledgeable of psychedelic usage.

A correlation test was conducted to examine the relationship between perceived effectiveness and perceived safety. The Pearson/Spearman correlation coefficient was -.58(p =<.001). This indicates a negative strong correlation between the two variables. Therefore, participants who perceived psychedelics as more effective perceived them as safe.

A correlation test was conducted to examine the relationship between perceived knowledge and perceived acceptability. The Pearson/Spearman correlation coefficient was 1.00 (p = .000). This indicates no relationship between the two variables. Therefore, these is no significant statistical evidence that the correlation between perceived knowledge and perceived acceptability is significant.

A correlation test was conducted to examine the relationship between perceived safety and perceived acceptability. The Pearson/Spearman correlation coefficient was -.47(p = <.001). This indicates a negative moderate correlation between the two variables. Therefore, participants who perceived psychedelics as safe moderately perceived them as less acceptable.

A correlation test was conducted to examine the relationship between perceived safety and perceived knowledge. The Pearson/Spearman correlation coefficient was -.47(p = <.001). This indicates a negative moderate correlation

between the two variables. Therefore, participants who perceived psychedelics as safe were moderately less knowledgeable about psychedelic use.

Relationships Between Multiple Variables

Multivariate linear regression tests were conducted to understand the relationship between dependent variable of perceived effectiveness, perceived safety, perceived acceptability, and perceived knowledge of psychedelic use and multiple independent variables. Tables 5 - 8 are a presentation of these data analyses.

Table 5. Multivariate Linear Regression on Perceived Effectiveness of Psychedelic Use

	Unstandardized Coefficients		95.0% Confidence Interval for β		
(N=95)	β	Std. Error	Lower Bound	Upper Bound	Sig.
Effectiveness*	9.97	2.97	4.00	15.93	0.00
Age	0.01	0.05	-0.08	0.10	0.85
Male	0.99	1.46	-1.95	3.93	0.50
Female	-3.25	3.35	-9.99	3.49	0.34
Hispanic	-0.94	2.28	-5.52	3.64	0.68
Asian	2.27	1.89	-1.53	6.07	0.24
White	1.14	0.97	-0.80	3.08	0.24
Black	1.40	2.33	-3.28	6.08	0.55
Religiosity	0.52	0.46	-0.41	1.45	0.27
Political Ideology	-0.32	0.41	-1.14	0.49	0.43
Psychedelic Usage	-1.41	0.95	-3.33	0.50	0.14

A multivariate linear regression analysis was conducted to examine the relationship between perceived effectiveness of psychedelic use and age, gender, ethnicity, religiosity, political ideology, and prior psychedelic usage (see Table 5). The model was not statistically significant [$F(10, 47) = 1.45$, $p = .189$], indicating that the model did not provide a good fit to the data. The independent variables accounted for 23.6% of the variance in the dependent variable. None of the independent variables in the model were statistically significant predictors of the dependent variable.

Table 6. Multivariate Linear Regression on Perceived Safety of Psychedelic Use

	Unstandardized Coefficients		95.0% Confidence Interval for β		
(N=95)	β	Std. Error	Lower Bound	Upper Bound	Sig.
Constant*	10.62	3.19	4.21	17.04	0.00
Age	0.07	0.05	-0.03	0.17	0.16
Male	0.23	1.57	-2.94	3.39	0.89
Female	4.43	3.60	-2.81	11.68	0.23
Hispanic	0.18	2.45	-4.75	5.11	0.94
Asian	1.55	2.03	-2.53	5.63	0.45
White	-0.11	1.04	-2.20	1.97	0.91
Black	0.59	2.50	-4.44	5.63	0.81
Religiosity	-0.68	0.50	-1.68	0.32	0.18
Political Ideology	0.15	0.44	-0.73	1.03	0.73
Psychedelic Usage	2.42	1.02	0.36	4.48	0.02

A multivariate linear regression analysis was conducted to examine the relationship between perceived safety of psychedelic use and age, gender, ethnicity, religiosity, political ideology, and psychedelic usage (see Table 6). The model was not statistically significant [$F(10, 47) = 1.94$, $p = .06$], indicating that the model did not provide a good fit to the data. The independent variables accounted for 29.3% of the variance in the dependent variable. However, psychedelic usage was found to have a significant positive effect on perceived safety of psychedelic use ($\beta = .335$, $p = .02$), suggesting previous psychedelic use had a positive impact on perceived safety of psychedelic use even when controlling for the other variables in the model.

Table 7. Multivariate Linear Regression on Perceived Acceptability of Psychedelic Use

	Unstandardized Coefficients		95.0% Confidence Interval for β		
(N=95)	β	Std. Error	Lower Bound	Upper Bound	Sig.
Constant*					
Age	0.08	0.06	-0.04	0.20	.17
Male	4.22	1.92	0.35	8.09	.03
Female	1.09	4.41	-7.77	9.96	.81
Hispanic	-0.85	3.00	-6.88	5.18	.78
Asian	2.81	2.48	-2.18	7.81	.26
White	0.64	1.27	-1.92	3.19	.62
Black	-2.49	3.06	-8.64	3.67	.42
Religiosity	0.22	0.61	-1.01	1.44	.72
Political Ideology	-1.05	0.53	-2.12	0.02	.06
Psychedelic Usage	-3.85	1.25	-6.37	-1.33	.00

A multivariate linear regression analysis was conducted to examine the relationship between perceived acceptability of psychedelic use and age, gender, ethnicity, religiosity, political ideology, and psychedelic usage (see Table 7). The model was found to be statistically significant [$F(10, 47) = 3.392$, $p = .002$], indicating that the model provided a good fit to the data. The independent variables accounted for 41.9% of the variance in the dependent variable. Psychedelic usage was found to have a significant negative effect on perceived acceptability of psychedelic use ($\beta = -.395$, $p = .00$), suggesting previous psychedelic use had a negative impact on perceived acceptability of psychedelic use even when controlling for the other variables in the model.

Table 8. Multivariate Linear Regression on Perceived Knowledge of Psychedelic Use

	Unstandardized Coefficients		95.0% Confidence Interval for β		
(N=95)	β	Std. Error	Lower Bound	Upper Bound	Sig.
Constant*	13.91	3.90	6.06	21.76	<.001
Age	0.08	0.06	-0.04	0.20	0.17
Male	4.22	1.92	0.35	8.09	0.12
Female	1.09	4.41	-7.77	9.96	0.81
Hispanic	-0.85	3.00	-6.88	5.18	0.78
Asian	2.81	2.48	-2.18	7.81	0.26
White	0.64	1.27	-1.92	3.19	0.62
Black	-2.49	3.06	-8.64	3.67	0.42

A multivariate linear regression analysis was conducted to examine the relationship between perceived knowledge of psychedelic use and age, gender,

ethnicity, religiosity, political ideology, and psychedelic usage (see Table 8). The model was found to be statistically significant [$F(10, 47) = 3.392$, $p = .002$], indicating that the model provided a good fit to the data. The independent variables accounted for 41.9% of the variance in the dependent variable. Psychedelic usage was found to have a significant negative effect on perceived knowledge of psychedelic use ($\beta = -.395$, $p = .00$), suggesting previous psychedelic use had a negative impact on perceived knowledge of psychedelic use even when controlling for the other variables in the model.

Conclusion

A total of 95 participants were surveyed for this research study. The demographics information included age, gender, degree program, ethnicity, religiosity, and political ideology. The study further asked participants whether they had ever used psychedelics in the past and if so, to what degree of benefit did it provide. The dependent variables for this study included the four items perceived effectiveness, perceived safety, perceived acceptability, and perceived knowledge of psychedelics use. The results revealed that religiosity, political ideology, and prior use of psychedelics were significant predictors of the dependent variables, suggesting perceptions of psychedelic use are affected by participants' religious and political background as well as previous use.

CHAPTER FIVE

DISCUSSION

Introduction

This study aimed to gain a deeper understanding of attitudes of undergraduate and graduate level students at Southern California Universities towards the use of psychedelics as a mental health treatment in clinical settings. Through a survey of a sample of social work students, the study aimed to uncover their perceptions, beliefs, and experiences regarding the use of psychedelics in therapy. This chapter will discuss the study's findings and provide an overview of its limitations. Recommendations for future social work practice, policies, and research will be considered. Finally, conclusions and implications for social work practice, policy, and future research will be considered.

Discussion on Findings

This study explored attitudes of social work students in the use of psychedelics to treat mental health and substance use disorders by measuring four related dependent variables; perceived effectiveness, perceived safety, perceived acceptability, and perceived knowledge. The results indicated statistically significant differences in the perceptions of effectiveness, safety, acceptability, and knowledge of psychedelics among individuals with different political ideologies, levels of religiosity and previous psychedelics use. It is

important to consider these differences in perceptions when attempting to educate individuals with different levels of religiosity, political ideologies, and experiences on using psychedelics in a clinical setting as well as risk and benefits associated with these drugs. Additionally, policymakers and mental healthcare providers should be mindful of the potential impact of religiosity and political ideologies on perceptions of psychedelics when designing and implementing policies and guidelines related to their use.

This study also found statistically significant difference in the groups of participants who have used psychedelics in the past and those who have not on the four dependent variables perceived effectiveness, perceived safety, perceived acceptability, and perceived knowledge of psychedelic use, indicating that these groups have different perceptions about these variables. These findings highlight the potential impact of personal experience on individuals' perceptions and may indicate that those who previously used psychedelics perceive them as more effective, safe, acceptable, and are more knowledgeable than those who have never used psychedelics. The previous research studies that were reviewed for this paper, did not consider participants' previous experiences using or not using psychedelics. While the scope of this study does not allow for claims about causal effects, we can hypothesize that those participants who had previously used psychedelics likely perceived it as more effective, safe, acceptable, and were knowledgeable simply based on their choice to use psychedelics.

Results indicated that levels of religiosity had an impact on participants perceived effectiveness, acceptability, and knowledge of psychedelic use, but not on perceived safety. Participants who identified as very religious, religious, and moderately religious had higher mean perceived effectiveness, acceptability, and knowledge scores than those who identified as not religious indicating that the religious groups may perceive psychedelics as more effective, acceptable, and are more knowledgeable of psychedelics use. While the previous research studies that were reviewed for this paper did not consider participants' level of religiosity, the use of psychedelics in a variety of different religious traditions, spirituality, and indigenous practices has been chronicled (Belouin & Henningfield, 2018; Davis et al., 2021; Earp & Yaden, 2021; George ed al., 2019; Pilecki et al., 2021).

Political ideology also impacted participants perceived effectiveness, safety, acceptability, and knowledge of psychedelic use. Participants who identified as progressive had lower mean perceived effectiveness, acceptability, and knowledge, while they had higher perceived safety scores than those who identified as moderate, somewhat conservative, and conservative. Although previous research studies have not taken political ideology into account when studying attitudes of psychedelic use, it would be important to realize that political ideology can impact attitudes.

The analyses between multiple variables indicated that previous use of psychedelics, was a statistically significant predictor of perceived safety, while

the other independent variables did not prove to significantly impact these variables. Further analyses on perceived acceptability and perceived knowledge proved to be statistically significant, suggesting there is a relationship between both dependent variables, perceived acceptability and perceived knowledge, and the independent variables of age, gender, ethnicity, religiosity, political ideology, and prior psychedelics use. While previous research studies that were reviewed for this study did not consider these variables, it would be to consider the ways perceived acceptability and perceived knowledge can impact attitudes and opinions related to psychedelic usage.

Limitations of Study

Interpretation of the study results should be made with the awareness of the limitations in this study. Due to the location of this study taking place in a progressive area of the United States, it is possible that many of the participants lean more towards progressive values, which could impact perceptions on illicit drug use to include psychedelics. A more comprehensive sampling from other areas of the country would possibly garner a fuller range of attitudes from both participants in progressive and conservative areas of the country. Furthermore, a larger sample size in general would help to ensure that the results would be more generalized to a larger population and would subsequently be more statistically reliable. Next, due to long standing stigmas and biases about psychedelic use, participants may not be comfortable sharing personal information about their own experiences with psychedelics. Although, the goal is to always get the most

truthful responses, it is possible that participants may be influenced to not be completely forthcoming with their responses.

Finally, this study does not fully explore stigma and biases that might help to explain the attitudes toward psychedelics for mental health treatments, which would likely be a meaningful conversation considering a conceivable future declassification of psychedelics at state or federal levels. Stakeholders are pushing for this declassification due to the positive results they are seeing in clinical trials using psychedelics to treat mental health disorders (Psychedelics Drug Development Tracker, 2021.) Stigma and biases exist on a subconscious level but can have a tremendous impact on how individuals view substance use and mental health.

Recommendations

Further study on attitudes, biases, and stigma surrounding psychedelic use in treating mental health disorders, and especially substance use disorders, would be beneficial and is recommended. Having a thorough understanding of stigma and biases of using psychedelics in clinical settings could help to determine the most appropriate ways social workers and other stakeholders can move forward to advocate for safe, responsible, fair, and effective mental health treatments using psychedelics.

It is recommended that social work programs provide more education and training to social work students on psychedelics. Social workers are often at the frontlines advocating for access to mental health care. Legitimate therapeutic

psychedelic treatments are currently being studied, but do not have firm parameters for use in clinical settings. A broader knowledge base on using psychedelics as a mental health treatment could better shape social work practice in advocating for access to care as well as effective and safe implementation of psychedelics.

Conclusion

This chapter discussed the findings of this research study. The results of this study found that personal characteristics such as religiosity and political ideology influence individuals' perceptions of effectiveness, safety, acceptability, and knowledge of psychedelic use. These results further implicated differences between individuals who have used psychedelics previously and those who have not on their perceptions of effectiveness, safety, acceptability, and knowledge of psychedelic use. Other demographic information such as age, gender, ethnicity, and program of study did not prove to be statistically significant predictors of attitudes toward psychedelic use. The results provided valuable insights into the perspectives of the next generation of mental health professionals and can inform future discussions on the role of psychedelics in the field of social work.

APPENDIX A:

INFORMED CONSENT

INFORMED CONSENT
(Electronic)

The study in which you are being asked to participate is designed to investigate attitudes and knowledge of MSW students toward the use of psychedelics to treat mental health and substance use disorders. This study is being conducted by Amanda Nickles under the supervision of Professor Yawen Li, Professor of Social Work, California State University, San Bernardino. This study has been approved by the Institutional Review Board, California State University, San Bernardino.

PURPOSE: The purpose of this study is to identify and describe the attitudes and knowledge of MSW students at California State University San Bernardino toward psychedelic assisted mental health therapy. Understanding the attitudes of current MSW students will give a glimpse of the type of support that might be given in the implementation, promotion, and advocation of these drug therapies.

DESCRIPTION: Participants will be asked questions related to their opinions, attitudes, and knowledge related to psychedelics for recreational and therapeutic purposes.

PARTICIPATION: Your participation is completely voluntary and you do not have to answer any questions you do not wish to answer. You may skip or not answer any questions and can freely withdraw from participation at any time.

ANONYMOUS: All collected data is anonymous. Data collected for this study will be collected through Qualtrics, using a setting that does not allow gathering of IP address that could link participants to the information collected ensuring anonymity. All data collected will be stored in the Google drive provided by CSUSB using the authors credentials. Survey information will be destroyed 3 years after the project has ended.

DURATION: A survey of 30 questions or less will be distributed via Qualtrics and should take approximately 10-15 minutes to complete.

RISKS: There is a slight risk that participants might feel uncomfortable answering questions related to their attitudes and opinions about illicit substances, more specifically psychedelics.

BENEFITS: The benefit of this study is to gain knowledge about social work students attitudes psychedelics which can inform and shape clinical practice using therapeutic psychedelics in the future.

CONTACT: If you have any questions about this study, please feel free to contact Dr. Yawen Li at 909-537-5584, or Yawen.Li@csusb.edu.

RESULTS: Results of the study can be obtained from the Pfau Library ScholarWorks database (http://scholarworks.lib.csusb.edu/) at California State University, San Bernardino after July 2023.

CONFIRMATION STATEMENT:
I understand that I must be 18 years of age or older to participate in your study, have read and understand the consent document and agree to participate in your study. I agree to participate in this study: _____ YES _____ NO

APPENDIX B:

RESEARCH INSTRUMENT

Research Instrument

Attitudes and Knowledge of Social Work Students to Use Psychedelics to Treat Mental Health and Substance Use Disorders

The following are definitions of terms used in this survey:

Psychedelics, refers to substances that significantly alter an individual's mind and perception to include but not limited to LSD, psilocybin or magic mushrooms, ketamine, ayahuasca, peyote, and MDMA.

Therapeutic psychedelics, refers to the use of psychedelic drugs to treat mental health and substance use disorders in a clinical setting.

Mental health disorder, refers to a condition that affects your thinking, feeling, mood, and behavior Examples of mental health disorders include but are not limited to depression, anxiety disorders, schizophrenia, eating disorders and addictive behaviors.

SUD or substance use disorder, refers to a disease that affects a person's brain and behavior and leads to an inability to control the use of a legal or illegal drug or medication.

Demographics questions

Age:

Gender: Male Female Transgender Non-Binary

Transgender Prefer not to answer

Ethnicity: Hispanic Asian Black Native American

White Other

Level of School: BASW MSW

College you attend:

To what level, do you consider yourself to be religious?

Not religious Slightly religious Moderately religious

Religious Very Religious

How would you describe your political ideology?

Conservative Somewhat conservative Moderate

Somewhat progressive Progressive I do not subscribe to any

of these

BASW and MSW students' perceived effectiveness of psychedelics to treat mental health and SUD

1. The use of therapeutic psychedelics can improve outcomes in mental health disorders.
   Strongly Agree Agree Neutral Disagree Strongly Disagree

2. The use of therapeutic psychedelics can improve outcomes in substance use disorders.

   Strongly Agree Agree Neutral Disagree Strongly Disagree

3. The use of psychedelics increases risk of mental health disorders.
   Strongly Agree Agree Neutral Disagree Strongly Disagree

4. The use of psychedelics increases risk of substance use disorders.

Strongly Agree Agree Neutral Disagree Strongly Disagree

BASW and MSW students' perceived safety of taking psychedelics to treat mental health and SUD

5. Psychedelics are addictive.

Strongly Agree Agree Neutral Disagree Strongly Disagree

6. The use of psychedelics is unsafe.

Strongly Agree Agree Neutral Disagree Strongly Disagree

7. Psychedelics are more harmful than tobacco.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

8. Psychedelics are more harmful than marijuana

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

9. Psychedelics are more harmful than alcohol.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

BASW and MSW students' acceptability of taking psychedelics for treatment of mental health and SUD

10. I think psychedelic assisted treatment is a reasonable treatment approach for mental health or substance use disorders

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

11. I would advocate for the use of psychedelics to treat mental health disorders

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

12. I would advocate for the use of psychedelics to treat substance use disorders.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

13. Social workers should play an active role in the administration of therapeutic psychedelics.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

14. I support recreational use of psychedelics.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

15. I would vote for legalization of therapeutic psychedelics.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

BASW and MSW students' knowledge on the use of psychedelics to treat mental health and SUD

16. It is important for social workers to be knowledgeable about therapeutic psychedelics.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

17. I have general knowledge about the various mind-altering effects of psychedelic drugs.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

18. I have a clear understanding of ways psychedelics can be used for mental health and SUD treatment

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

19. My social work student experiences have given me adequate knowledge about therapeutic psychedelics.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

BASW and MSW students' previous use of psychedelics

20. I have used psychedelics in the past.

Yes *No*

21. I have used psychedelics in the past and I feel it was a beneficial experience.

Yes *No* *Not Applicable*

APPENDIX C:

IRB APPROVAL LETTER

August 30, 2022

CSUSB INSTITUTIONAL REVIEW BOARD
Administrative/Exempt Review Determination
Status: Determined Exempt
IRB-FY2022-207

Yawen Li Amanda Nickles
CSBS - Social Work
California State University, San Bernardino
5500 University Parkway
San Bernardino, California 92407

Dear Yawen Li Amanda Nickles:

Your application to use human subjects, titled “Attitudes of MSW Students on the Use of Psychedelics as a Mental Health Treatment in Clinical Settings” has been reviewed and determined exempt by the Chair of the Institutional Review Board (IRB) of CSU, San Bernardino. An exempt determination means your study had met the federal requirements for exempt status under 45 CFR 46.104. The CSUSB IRB has weighed the risks and benefits of the study to ensure the protection of human participants.

This approval notice does not replace any departmental or additional campus approvals which may be required including access to CSUSB campus facilities and affiliate campuses. Investigators should consider the changing COVID-19 circumstances based on current CDC, California Department of Public Health, and campus guidance and submit appropriate protocol modifications to the IRB as needed. CSUSB campus and affiliate health screenings should be completed for all campus human research related activities. Human research activities conducted at off-campus sites should follow CDC, California Department of Public Health, and local guidance. See CSUSB's COVID-19 Prevention Plan for more information regarding campus requirements.

You are required to notify the IRB of the following as mandated by the Office of Human Research Protections (OHRP) federal regulations 45 CFR 46 and CSUSB IRB policy. The forms (modification, renewal, unanticipated/adverse event, study closure) are located in the Cayuse IRB System with instructions provided on the IRB Applications, Forms, and Submission webpage. Failure to notify the IRB of the following requirements may result in disciplinary action. The Cayuse IRB system will notify you when your protocol is due for renewal. Ensure you file your protocol renewal and continuing review form through the Cayuse IRB system to keep your protocol current and active unless you have completed your study.

- **Ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.**
- **Submit a protocol modification (change) if any changes (no matter how minor) are proposed in your study for review and approval by the IRB before being implemented in your study.**
- **Notify the IRB within 5 days of any unanticipated or adverse events are experienced by subjects during your research.**
- **Submit a study closure through the Cayuse IRB submission system once your study has ended.**

If you have any questions regarding the IRB decision, please contact Michael Gillespie, the Research Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu. Please include your application approval number IRB-FY2022-207 in all correspondence. Any complaints you receive from participants and/or others related to your research may be directed to Mr. Gillespie.

Best of luck with your research.

Sincerely,

King-To Yeung

King-To Yeung, Ph.D., IRB Chair
CSUSB Institutional Review Board

KY/MG

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